CLAIM AMENDMENTS

Please amend claims 1-59 and add new claims 60-68 as indicated below:

CLAIMS

1. (Currently amended) A mechanism comprising a main drive spindle ~~(4)~~ being driven by a power supply and rotatable axially~~-~~; at least one eccentric element ~~(1)~~ being in communication with said drive spindle ~~(4)~~ and producing eccentric motion; ~~characterized by comprising~~ at least one bearing means ~~(5)~~ surrounding the eccentric element ~~(1)~~; and at least one drive transmitting element ~~(7)~~ being configured to perform an essentially linear movement which is transformed into an orbiting motion of a ~~the~~ final drive spindle, one of the terminals of the drive transmitting element ~~(7)~~ being connected to said eccentric bearing means (5) and the other terminal to ~~a~~ the final drive spindle ~~(8)~~, the drive transmitting element ~~(7)~~ passing through a drive transferring spindle bearing ~~(9)~~ associated with a supporting piece ~~(10)~~ connected by bearings ~~(11)~~ to the main frame ~~(2)~~.

2. (Currently amended) A mechanism according to Claim 1, ~~characterized by~~ comprising at least one final spindle bearing ~~(12)~~ connected to said final drive spindle ~~(8)~~ and said drive transferring element ~~(7)~~.

3. (Currently amended) A mechanism according to Claim 1 ~~any of the foregoing claims~~, further comprising a terminal unit ~~characterized by~~ comprising a bearing means ~~(15)~~ supporting the terminal unit to be operative at the other end of said final drive spindle ~~(8)~~.

4. (Currently amended) A mechanism according to Claim 1~~any of the foregoing claims~~, ~~characterized by~~ comprising a rocker bearing (16) providing the connection of the final drive spindle (8) to the main frame (2).

5. (Currently amended) A mechanism according to ~~any of~~ Claim~~s~~ 1, further comprising ~~characterized in that~~ a bearing ~~is provided that~~ which is fixed to the main frame at a lower or upper side of the final spindle bearing ~~(12)~~, respectively, when the final spindle bearing ~~(12)~~ is positioned to a point close to the upper or lower end of said final spindle ~~(8)~~.

6. (Currently amended) A mechanism according to ~~any of the foregoing~~ Claim~~s~~ 1, ~~characterized by~~ comprising a spring ~~(18)~~ provided on the lower side of said supporting piece ~~(10)~~ and another supporting piece ~~(17)~~ surrounding ~~such~~ said spring ~~(18)~~ so that said final drive spindle ~~(8)~~ can displace on the axial direction.

7. (Currently Amended) A mechanism according to Claim~~s~~ 1 ~~and 6~~, ~~characterized in that~~ wherein said bearing means ~~(5)~~ can rotate on the radial direction with respect to the longitudinal axis of said main drive spindle ~~(4)~~.

8. (Currently Amended) A mechanism according to Claim 1~~any of the foregoing claims~~, ~~characterized by~~ further comprising a bearing lower end ~~(20)~~ with a spherical formation provided on the lower end of said final drive spindle ~~(8)~~, and a sloped platform ~~(21)~~ provided in a rotating manner on the main frame ~~(2)~~, the platform ~~(21)~~ being in contact with said lower end ~~(2)~~ so that said final drive spindle ~~(8)~~ can displace on the axial direction.

9. (Currently Amended) A mechanism according to Claim 8, ~~characterized by~~ further comprising a support ~~(22)~~ being supported with springs ~~(18)~~, and the support ~~(22)~~ being fixed to the spherically formed bearing lower end ~~(20)~~.

10. (Currently Amended) A mechanism according to Claims ~~8 and~~ 9, ~~characterized by~~ further comprising a final spindle joint ~~(19)~~ provided between said support ~~(22)~~ and said final drive spindle ~~(8)~~.

11. (Currently Amended) A mechanism according to Claim 8, ~~characterized by~~ further comprising a spring ~~(18)~~ provided on the lower region of a straight sliding bearing ~~(25)~~ carrying said final drive spindle ~~(8)~~.

12. (Currently Amended) A mechanism according to Claim 1~~any of the foregoing claims~~, ~~characterized by~~ further comprising a flexible tube means ~~(27)~~ provided on the lower side of said final drive spindle ~~(8)~~ and an air inlet ~~(29) is provided~~ for supplying air to said tube means ~~(27)~~ so that said final drive spindle ~~(8)~~ can displace on the axial direction.

13. (Currently Amended) A mechanism according to Claim 1~~any of the foregoing claims~~, ~~characterized by~~ further comprising an actuator means ~~(30)~~ positioned on the lower part of said final drive spindle ~~(8)~~ so that said final drive spindle ~~(8)~~ can displace on the axial direction.

14. (Currently Amended) A mechanism according to Claim 1~~any of the foregoing claims~~ ; ~~characterized by~~ further comprising an actuator means ~~(30)~~ connected to a support ~~(31)~~ with one end supporting said final drive spindle ~~(8)~~ so that said final drive spindle ~~the latter (8)~~ can displace on the axial direction.

15. (Currently Amended) A mechanism according to Claim 1~~any of the foregoing claims~~, ~~characterized by~~ further comprising a connection element ~~(34)~~ driven by the drive transferring spindle ~~(7)~~, ~~the~~ said final drive spindle ~~(8) is~~ being provided by rocker bearings ~~(16)~~ onto the connection element ~~(34)~~ for forming a group; and a group joint ~~(38)~~ connected to the connection element ~~(34)~~ for connecting a secondary group to the group, said ~~and the~~ final drive spindle being also supported by rocker bearings ~~(16)~~ to the piece lengthened from the frame element ~~(2)~~.

16. (Currently Amended) A mechanism according to Claim 15, ~~characterized by~~ further comprising a bar joint ~~(39)~~, a bar ~~(40)~~, and an actuator means ~~(30)~~ driving ~~this~~ said bar ~~(40)~~, said bar joint ~~(39)~~ being connected to the connection element ~~(34)~~ of said secondary group ~~(37)~~ so that said secondary group ~~(37)~~ can rotate around the group joint ~~(38)~~.

17. (Currently Amended) A mechanism according to Claim 1~~any of the foregoing claims~~, ~~characterized by~~ further comprising an adapter support ~~(41)~~ connected to the terminal unit bearing ~~(15)~~.

18. (Currently Amended) A mechanism according to claim 17, ~~characterized in that~~ wherein said adapter support ~~(41)~~ comprises key channels ~~(43)~~ or threads providing the connection of said adapter support~~the former (41)~~ to said final drive spindle ~~(8)~~.

19. (Currently Amended) A mechanism according to Claim 1 ~~any of the foregoing claims~~, ~~characterized in that~~ wherein the mechanism is driven by a single drive transferring spindle ~~(7)~~, when said final drive spindle ~~(8)~~ is provided multiply.

20. (Currently Amended) A mechanism according to Claim 1, ~~characterized by~~ comprising multiple eccentric elements ~~(1)~~ connected to said main drive spindle ~~(4)~~, multiple drive transferring spindles ~~(7)~~ connected to this eccentric elements ~~(1)~~, and multiple final drive spindles ~~(8)~~ connected to such spindles.

21. (Currently Amended) A mechanism according to Claim 1 ~~any of the foregoing claims~~, ~~characterized by~~ further comprising a threading group ~~(47)~~ positioned on the lowest position of said main drive spindle ~~(4)~~.

22. (Currently Amended) A mechanism according to Claim 3~~any of the foregoing claims~~, ~~characterized by~~ comprising piping means ~~(51)~~ to provide fluid to said terminal unit bearing.

23. (Currently Amended) A mechanism according to Claim 22, ~~characterized by~~ comprising openings ~~(52)~~ embodied to enter said piping means ~~(51)~~ into said adapter support ~~(41)~~.

24. (Currently Amended) A mechanism according to Claim 1, ~~characterized in that~~ wherein the mechanism is applicable for a group consisting of cleaning means, soil processing means, construction means, solid and fluid material orienting means.

25. (Deleted)

26. (Currently Amended) A mechanism ~~comprising a main drive spindle (4) being driven by a power supply and rotatable axially ; at least one eccentric element (1) being in communication with the main drive spindle (4) and producing eccentric motion; characterized by comprising at least one bearing means (5) surrounding the eccentric element (1); at least one primary drive transferring element (7) being configured to perform an essentially linear movement, one of the terminals of the drive transmitting element (7) being connected to the eccentric bearing means (5) and the other terminal to a primary plate (53), the drive transmitting element (7) passing through a drive transferring spindle bearing (9) associated with a supporting piece (10) connected by bearings (11) to the main frame (2), the~~ according to Claim 1, wherein said drive transmitting elements comprise at least one primary drive transferring element and at least one secondary drive transferring element, said primary drive transferring element having one terminal connected to said bearing means and the other terminal to a primary plate such that the linear movement of the primary drive transferring element~~(7)~~ is transformed into an orbiting motion of the primary plate ~~(53)~~, and ~~at least one~~ said secondary drive transferring element(s) being configured to perform an essentially linear movement~~,~~ and being connected to a secondary plate ~~(54),~~ the linear movement of the secondary drive transferring element(s) being ~~(7) is~~ transformed into an orbiting motion of the secondary plate (54), and at least one final drive spindle (65) which is supported by the primary plate

(53) and the secondary plate (54) in a movable or flexible manner (63, 64), and said secondary plate (54) whereby the final drive spindle (8) produces orbiting movement.

27. (Currently Amended) A mechanism according to claim 26, ~~characterized in that~~ wherein said drive transferring shafts ~~(53, 54),~~ connected to the primary plate, ~~(53)~~ are driven by the same axially rotating shaft, the drive transferring shafts ~~(53, 54)~~ transferring identical ellipsoid movements to the primary plate ~~(53)~~, and secondary drive transferring shafts ~~(61, 62)~~ connected to the secondary plate ~~(54)~~ are driven by the same axially rotating shaft, the drive transferring shafts ~~(61, 62)~~ transferring identical ellipsoid movements to the primary plate ~~(53)~~.

28. (Currently Amended) A mechanism according to Claim 26, wherein~~characterized in that~~ the movable or flexible support is achieved by rocker bearings ~~(62,63)~~ comprised by said primary ~~(53)~~ and secondary plate ~~(54)~~ and supporting each said final drive spindle.

29. (Currently Amended) A mechanism according to Claim 26, ~~characterized in that~~ wherein

said at least one final drive spindle is driven by both the primary plate (53) and the secondary plate (54).

30. (Currently Amended) A mechanism ~~comprising a main drive spindle being driven by a power supply and being rotatable axially ; at least one eccentric element, being in communication with the main drive spindle and producing eccentric motion; characterized by comprising at least one bearing means surrounding the eccentric element; at least one primary drive transferring element being configured to perform an essentially linear movement, one of the terminals of the drive transferring element being connected to the bearing means and the other terminal to a primary plate (53), the drive transmitting element (7) passing through a drive transferring spindle bearing (9) associated with a supporting piece (10) connected by bearings (11) to the main frame (2), the~~ according to claim 1, wherein said drive transmitting elements comprise at least one primary drive transferring element and at least one secondary drive transferring element, said primary drive transferring element having one terminal connected to said eccentric bearing means and the other terminal to a primary plate such that linear movement ~~is~~ of said primary drive transferring element is transformed into an orbiting motion of the primary plate ~~(53)~~, and further comprising one axially rotating bearing ~~(73)~~ connected to a secondary plate ~~(54)~~ and to the main frame; at least one ellipsoid bearing ~~(66,67)~~ connected to said secondary plate ~~(54)~~ and to the main frame; and at least one final drive spindle ~~(65)~~ supported by the primary plate ~~(53)~~ and the secondary plate ~~(54)~~ in a movable or flexible manner ~~(63, 64)~~, and said secondary plate ~~(54)~~, whereby the final drive spindle produces orbiting movement.

31. (Currently Amended) A mechanism according to Claim 30, ~~characterized in that~~ wherein said drive transferring shafts ~~(57, 58)~~ connected to the primary plate ~~(53)~~ are driven by the same axially rotating shaft , the drive transferring shafts ~~(57, 58)~~ transferring identical ellipsoid movements to the primary plate ~~(53)~~.

32. (Currently Amended) A mechanism according to Claim 30, ~~characterized in that~~ wherein said at least one ellipsoid bearing ~~(66,67)~~ comprises a spindle ~~(68)~~, a bearing ~~(69)~~ rotating on the spindle, an eccentric spacer ~~(70)~~ positioned externally to the bearing, a

rotating bearing ~~(71)~~ positioned externally to the spacer, and a connection support ~~(72)~~ being positioned externally to the rotating bearing and connected to the main frame.

33. (Currently Amended) A mechanism according to Claim 30, ~~characterized in that~~ wherein said axially rotating bearing ~~(73)~~ comprises a drive transferring spindle ~~(76)~~ connected to an actuator, an eccentric spacer ~~(77)~~ connected to the spindle, a rotating bearing ~~(75)~~ positioned externally to the spacer, and a support ~~(74)~~ connected to the drive plate.

34. (Currently Amended) A mechanism ~~comprising a main drive spindle being driven by a power supply and being rotatable axially ; at least one eccentric element being in communication with the main drive spindle and producing eccentric motion; characterized by comprising at least one bearing means surrounding the eccentric element; at least one primary drive transferring element being configured to perform an essentially linear movement, one terminal of the drive transferring element being connected to the bearing means and the other terminal to a primary plate (53), the drive transmitting element (7) passing through a drive transferring spindle bearing (9) associated with a supporting piece (10) connected by bearings (11) to the main frame (2), the~~ according to claim 1, wherein said drive transmitting elements comprise at least one primary drive transferring element and at least one secondary drive transferring element, said primary drive transferring element having one terminal connected to said eccentric bearing means and the other terminal to a primary plate such that the linear movement ~~is~~ of said primary drive transferring element is transformed into an orbiting motion of the primary plate ~~(53)~~, and at least one support ~~(78)~~ being connected to a secondary plate ~~(54)~~ and to the main frame by means of a number of actuators ~~(79,80, 81,82)~~ ; at least one ellipsoid bearing ~~(66,67)~~ connected to the secondary plate ~~(54)~~ and to the main frame, and at least one final drive spindle ~~(65)~~ supported by the primary plate ~~(53)~~ and the secondary plate ~~(54)~~ in a movable or flexible manner ~~(63, 64)~~, and said secondary plate ~~(54)~~, whereby the final drive spindle produces orbiting movement.

35. (Currently Amended) A mechanism according to Claim 34, ~~characterized in that~~ wherein said actuators ~~(79, 80, 81,82)~~ are driven by single or double impacted linear or fluid pressure.

36. (Currently Amended) A mechanism according to ~~any of~~ Claims ~~34 or 35~~, ~~characterized in that~~ wherein, when said actuators are driven by fluid pressure, the fluid pressure and fluid amounts fed to the actuators are controlled by control elements featuring on/off or proportional control.

37. (Currently Amended) A mechanism according to ~~any of the~~ Claims ~~34 to 36~~, ~~characterized by~~ further comprising point or proportional sensors positioned on the actuators or the frame to provide said control elements with control data.

38. (Currently Amended) A mechanism according to Claim 34, ~~characterized in that~~ wherein said at least one ellipsoid bearing ~~(66,67)~~ comprises a spindle ~~(68)~~, a bearing ~~(69)~~ rotating on the spindle, one eccentric spacer ~~(70)~~ positioned externally to the bearing, a rotating bearing ~~(71)~~ positioned externally to the spacer, and one connection support ~~(72)~~ being positioned externally to the rotating bearing and is connected to the main frame.

39. (Deleted)

40. (Deleted)

41. (Deleted)

42. (Deleted)

43. A mechanism comprising a main drive spindle being driven by a power supply and rotatable axially ; at least one eccentric element being in communication with the main drive spindle and for producing eccentric motion; characterized by comprising at least one bearing means surrounding the eccentric element; a primary plate ~~(53)~~ connected to the main frame, at least one support ~~(78)~~ connected to the main frame and connected to a second plate ~~(54)~~, the mechanism being driven by means of a number of actuators ~~(79,80, 81,82)~~; at least one rocker or ellipsoid bearing ~~(84)~~ providing the connection of said secondary plate ~~(54)~~ and said primary plate ~~(53)~~, a support ~~(83)~~ connecting one of the plates ~~(53,54)~~, the support ~~(83)~~ connected to the main frame, and at least one final drive spindle, which is supported in a flexible or movable fashion by said primary plate ~~(53)~~ and said secondary plate ~~(54)~~, whereby the final drive spindle produces plurality of motion combinations.

44. A mechanism according to Claim 43, ~~characterized by~~ further comprising point or proportional sensors positioned on the actuators or the frame to provide said control elements with control data.

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59. (Deleted)

60. (New) A brushing unit for cleaning purpose comprising a mechanism according to claim 26 and further comprising plates produced preferably from thermoplastic material coated preferably with elastomer coatings having supporting functions, holes provided on said movable plates for rocker bearings, a supporting piece provided within the holes, and positioned between said drive plates.

61. (New) A brushing unit according to claim 60, further comprising a spindle passing through the openings provided along said drive plates, said spacers, and said supporting piece and accommodating at its tip a cylindrical bearing, a channel provided substantially along the vertical axis of said primary drive plate up to the hole , another hole provided to said spacer , and an space having a"T"shape and the space being provided in the spindle and wherein the cylindrical bearing where the end of said"T"shaped opening is extending comprises a spring and a spherical valve in communication with this spring, and an upper adapter accommodating said cylindrical bearing and a flexible pipe positioned on the extremity of said cylindrical bearing and optionally an additional fluid supplying element comprising a spindle, a cylindrical bearing positioned on the terminal of this spindle, a spherical valve positioned within this cylindrical bearing, and a spring that said spherical valve is connected thereto.

62. (New) A brushing unit according to Claim 61 comprising a liquid spraying piece provided on the terminal of said cylindrical bearing.

63. (New) A brushing unit according to Claim 61, further comprising fiber-felt like elements for use drying clean surfaces and a vacuum pump in connection with said fiber-felt like elements for vacuuming fluids remaining on said surfaces, said fiber-felt like elements being fibrous and capable of transferring fluid towards said flexible pipe connected thereto.

64. (New) A brushing unit according to Claim 63, wherein a hot air blower is employed in place of said vacuum pump and that heat-resistant fiber-felt like elements are positioned in order to polish said cleaned surface.

65. (New) A brushing unit according to Claim 60, wherein said plates are produced preferably from thermoplastic material coated with elastomer coatings for supporting purposes so as to define an integrated structure and further comprising a support piece, which is provided within the holes opening into said drive plates for flexible bearings and provided between said drive plates, a layer of the parts of said flexible bearings at primary and secondary plates assembled with washer like materials to the drive plates ; the final spindle being fixed to the integrated bearings by means of a fixation element or assembled into a hole within the integrated bearings in a tight-engaging manner and flexible hoses being provided for fluid transfer to a point before said valve for cleaning purposes, and an annular rubber/polyurethane elastomer based material with a hole at the center fastened to the single surfaces of drive plates or between two plates forming a drive plate enabling a rocker bearing to be obtained by tightening them with proper-diameter washers with a hole in the center and screwing holes on both surfaces.

66. (New) A mechanism according to Claim43, wherein said actuators are driven by means of a single or double impacted linear or fluid pressure.

67. (New) A mechanism according to Claim 43, wherein, when said actuators are driven with fluid pressure, the fluid pressure and fluid amounts fed to the actuators are controlled by control elements featuring on/off or proportional control.

68. (New) A method for producing orbiting movement, comprising the steps of -rotating an axially rotating main drive spindle, converting the axial rotation into an eccentric motion by means of an eccentric element connected to said main drive spindle,converting the eccentric motion essentially to linear motion by means of a drive transferring spindle connected to one end of said eccentric element, and -transferring the linear motion to the final drive spindle connected to the other end of said drive transferring spindle and thus orbiting this drive spindle, wherein the drive transmitting element passing through a drive transferring spindle bearing -associated with a supporting piece connected by bearings to the main frame, whereby the final drive spindle produces orbiting movement.